GC/MS Reviewer Checklist

GC/MS Instrument Qualified for Use

1. Check Instrument QC: Tune parameter within accepted tolerance
2. Check Method QC: Blanks and Cocaine-Codeine QC Mix within Tolerance

Proper Batch Setup

1. Proper use of QC measure throughout run: Blanks and Standards
2. Check Sequence Setup for Errors- Check Control Card Laboratory numbers, Vials and Sequence Sheet for Transcriptional Errors and Vials Analyzed for Placement Errors (Exactly how this is done needs to be discussed.)

Analytical Interpretation

1. Retention Time: +/- 1.5 %
2. Minimum Acceptance Criteria for Mass Spectral Confirmation: all ions and ion clusters
3. Use of proper method (for standards, blanks and samples) and standard (Base or Salt Form)
4. Confirm Standard Chromatography and Mass Spectrum consistent with QC folder
5. Ensure no carryover present in the blank before a sample or in the blank immediately after a multiple

Documentation

1. GC/MS Control Sheet not necessary for chain of custody in a one Chemist system. If the GC/MS Control sheet is eliminated, results can be reported on the back of the control card and, perhaps, on a re-worked powder sheet so duplication exists.
2. Check GC/MS results are reported correctly to the Control Card and Powder Sheet.
3. Check GC/MS history is documented for repeat samples on the Control Card and Powder Sheet. Enforcing could be difficult if only a case folder is submitted to the reviewer. Need to discuss if this will be necessary.
4. Sign off as the Reviewer in two locations- Possibly the Control Card where the secondary chemist currently signs and also on the powder sheet. If the Lab still needs two chemists on certificates for the current scheme, have IT add a field for the Reviewer on the control card.

Primary Chemist Review

1. **Review of Powder Sheet/Pharmaceutical Sheet**
    - A. Review all fields completed on Paperwork- Lab Number, City, Chemist, # analyzed, Evidence Weight, Description of sample-Type, Number, Color, Condition, etc, Preliminary and Final Result/Date
    - B. Math Check
    - C. Review Proper Tests Performed: Colors, Crystals, Gas Chromatography, UV, IR, A&L Identification, etc
    - D. Check Sampling Routine (Updated Training Manual by CBS would be helpful)
    - E. Review of Card and Powder Sheet for Transcriptional Errors
    - F. Review Balances Calibrated/Checked for Trafficking Samples

2. **Office Review (Performed by Office) and Chain of Custody**
    A. Check Certificate of Analysis with Sample in Envelope. Check Control Card and certificate to make sure results are correct.
    B. Provide receipt for samples returned to safe by Chemist